REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-16 are pending in the present application. Claims 1-14 have been amended and claims 15-16 have been added by the present amendment.

In the outstanding Office Action, claims 1, 6 and 8 were rejected under 35 U.S.C. § 102(e) as anticipated by Dent; and claims 2-5, 7 and 9-14 were indicated as allowable if rewritten in independent form.

Applicant thanks the Examiner for the indication of allowable subject matter.

Claims 1, 6 and 8 stand rejected under 35 U.S.C. § 102(e) as anticipated by Dent. This rejection is respectfully traversed.

In a compressed mode, a certain number of bits are punctured among pilot bit sequences of frame synchronization words to be transmitted over one frame for a desired number of slots. Before puncturing, the pilot bit sequences of frame synchronization words are classified into a plurality of pairs. Further, two pilot bit sequences of each pair have a relation characteristic between them.

In more detail, to obtain the relation characteristic, first pilot bit sequences of each pair are generated and then a second pilot bit sequence based on the first pilot bit sequence is generated. That is, the first pilot bit sequence is shifted by a predetermined bit length and is

then inverted to generate the second pilot bit sequence, thereby achieving a desired

correlation characteristic between the two pilot bit sequences. According to the present

invention, the relation characteristic is used to restore the original pilot bit sequences of

frame synchronization words from the received-compressed pilot bit sequences of frame

synchronization words.

For example, with reference to the non-limiting examples in Tables 4 and 7, for

Npilot = 3, $C_{1,3,}$ = $-C_{2,10}$ (see Table 7). As shown, a relationship exists between the bit

sequences. This relationship is used to restore the pilot bit sequences of the frame

synchronization words over the frame.

On the contrary, Dent does not teach or suggest any subject matter directed to frame

synchronization words and the restoration of frame synchronization words <u>in a compression</u>

<u>mode</u>, as in the present invention. Dent also does not teach or suggest receiving compressed

pilot bit sequences of frame synchronization words over a frame, in which the pilot bit

sequences are classified into pairs and two pilot bit sequences of each pair have a relation,

and in which one pilot bit sequence of each pair is the other pilot bit sequence shifted by a

predetermined bit length and then inverted in accordance with the relation. Dent also does

not track or suggest restoring the pilot bit sequences of the frame synchronization words

over the frame by using the relation.

Accordingly, it is respectfully submitted this rejection has been overcome.

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Further, the specification has been amended to correct minor informalities. It is believed no new matter has been added.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David A. Bilodeau**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP

Daniel Y.J. Kim, Esq.
Registration No. 36,186
David A. Bilodeau, Esq.
Registration No. 42,325

P.O. Box 221200
Chantilly, Virginia 20153-1200
703 766-3701 DYK/DAB:knv:lew
Date: December 23, 2004
Please direct all correspondence to Customer Number 34610

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